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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/303,561	09/09/1994	JOHANNES G. BEDNORZ	YOR919870074US4	8466
877	7590	10/31/2011	EXAMINER	
IBM CORPORATION			KOPEC, MARK T	
IP Law Department				
294 Route 100			ART UNIT	
P.O. BOX 100			PAPER NUMBER	
Somers, NY 10589-0100			1761	
			NOTIFICATION DATE	
			DELIVERY MODE	
			10/31/2011	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

iplawyor@us.ibm.com

Office Action Summary	Application No. 08/303,561	Applicant(s) BEDNORZ ET AL.	
	Examiner MARK KOPEC	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/28/11.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 24-26, 86-90 and 96-485 is/are pending in the application.
- 5a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) _____ is/are allowed.
- 7) ☒ Claim(s) 183, 231, 272, 273, 289, 318-321, 361, 377, 409, 450, 462, and 485 is/are rejected.
- 8) ☒ Claim(s) 209-211, 213-227, 231-267, 299-301, 303-305, 308-311, 314-317, 323-325, 328-331, 334-337, 339-342, 345-348, 351-354, 387-389, 391-393, 396-399, 402-405, 410-413, 416-419, 422-425, 464-466, 469-471, 475, 476, 478 is/are objected to.
- 9) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 05/22/87 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 07/053,307.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/08/90; 08/26/92</u> . | 6) <input type="checkbox"/> Other: _____ |

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This application is a CON of S.N. 08/060,470 (filed 05/11/93, now ABN), which application is a CON of S.N. 07/875,003 (filed 04/24/92, now ABN), which application is a DIV of S.N. 07/053,307 (filed 05/22/87, now ABN).

The CON data at page 1 of the specification has been updated to reflect the above current data.

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 07/053,307, filed on 05/22/87.

A completed/corrected copy of the **IDS** statements filed 08/08/90 and 08/26/92 are attached.

The amendment filed **02/28/11** is entered. Claims 24-26, 86-90, and 96-485 are pending. The following **deficiencies** in the amendment are noted:

There is no claim listing (status) of instant claims 1-23, 27-85 and 91-95 (e.g. original, cancelled, etc).

Correction is required. See MPEP 714 and 37 C.F.R. §1.121(c).

Claims 209-211, 213-227, 231-267, 299-301, 303-305, 308-311, 314-317, 323-325, 328-331, 334-337, 339-342, 345-348, 351-354, 387-389, 391-393, 396-399, 402-405, 410-413, 416-419, 422-425, 464-466, 469-471, 475, 476, 478 are objected to under 37

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CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims not been further treated on the merits.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 183, 231, 272, 273, 289, 318-321, 361, 377, 409, 450, 462, and 485 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Dependent claims 183, 273, and 361 do not further limit the independent claims from which they depend. Specifically, each of the dependent claims recites "maintaining said material at a temperature less than or equal to said T_c ". As the independent claims require "flowing a superconducting current through a material" or "comprising a superconducting current flowing therein", the materials inherently must be maintained at a temperature equal to (or less than) the T_c . Otherwise, the superconducting current would not be possible.

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Dependent claims 231, 289, 321, 377, 409, 450 and 462 do not further limit the claims from which they depend. Specifically, each of the dependent claims recites "wherein said rare earth-like elements include elements comprising a rare earth characteristic". By definition, according to the specification and the general knowledge of the skilled artisan, "rare earth-like elements" possess "a rare earth characteristic". The examiner construes the terms as equivalents.

In claims 272, 318, 319 and 320, the claim terminology "...applying the magnetic field or the substantially zero resistance to the flow of electrical current of a material" is confusing. There is no antecedent basis for "the magnetic field" and it is unclear as to what step(s) are required by "applying the substantially zero resistance to the flow of electrical current of a material". Clarification is required.

In dependent claim 485, it is unclear as to what step(s) are required by "...wherein said method comprises a method of fabricating said structure is a manufacturing method". Specifically, it cannot be determined what steps are included and/or excluded by such terminology.

The instant claims are allowable over the prior art of record and are enabled under 35 USC 112, 1st paragraph.

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Specifically, each of the instant claims has been amended to recite/require the specific combination of elements in accordance with the BPAI decision mailed 09/17/09 in copending (child/DIV) application 08/479,810. Additionally, each of the instant method claims recites some structural aspect relating to (or possessing) a superconductive current.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK KOPEC whose telephone number is (571)272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Kopec/
Primary Examiner, Art Unit
1761

MK
October 24, 2011